Panasonic

Basic Operating Instructions

Digital Camera/
Lens Kit/Double Zoom Lens Kit/Body

Model No. DMC-G3K/DMC-G3W
DMC-G3

Before use, please read these instructions completely.

More detailed instructions on the operation of this camera are contained in "Operating Instructions for advanced features (PDF format)" in the supplied CD-ROM. Install it on your PC to read it.

Web Site: http://www.panasonic-europe.com

Model number suffix "EB" denotes UK model.

EB

VQT3N48

Dear Customer,

We would like to take this opportunity to thank you for purchasing this Panasonic Digital Camera. Please read these Operating Instructions carefully and keep them handy for future reference. Please note that the actual controls and components, menu items, etc. of your Digital Camera may look somewhat different from those shown in the illustrations in these Operating Instructions.

Carefully observe copyright laws.

- Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws. Even for the purpose of private use, recording of certain material may be restricted.

Information for Your Safety

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE,

- **DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.**
- **USE ONLY THE RECOMMENDED ACCESSORIES.**
- **DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

THE SOCKET OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

■ **Product identification marking**

Product	Location
Digital Camera	Bottom
Battery charger	Bottom

■ **About the battery pack**

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- Do not heat or expose to flame.
- Do not leave the battery(ies) in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

Warning

Risk of fire, explosion and burns. Do not disassemble, heat above 60 °C or incinerate.

Caution for AC mains lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark ⓐ or the BSI mark ♆ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below. If in any doubt please consult a qualified electrician.

■ IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL ⏚ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF– KEEP DRY.

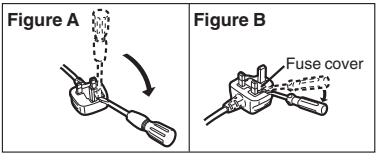
■ Before use

Remove the connector cover.

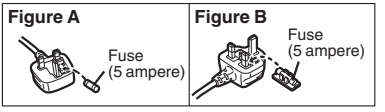
■ How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



■ About the battery charger

CAUTION!
- **DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.**
- **DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.**
- **DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.**
- **DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.**

- The battery charger is in the standby condition when the AC power supply cord is connected. The primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

■ Cautions for Use

- Do not use any other AV cables except the supplied one.
- Do not use any other USB connection cables except the supplied one.
- Always use a genuine Panasonic HDMI mini cable (RP-CDHM15, RP-CDHM30; optional). Part numbers: RP-CDHM15 (1.5 m) (5 feet), RP-CDHM30 (3.0 m) (10 feet)
- Always use a genuine Panasonic remote shutter (DMW-RSL1; optional).

Keep this unit as far away as possible from electromagnetic equipment (such as microwave ovens, TVs, video games etc.).
- If you use this unit on top of or near a TV, the pictures and/or sound on this unit may be disrupted by electromagnetic wave radiation.
- Do not use this unit near cell phones because doing so may result in noise adversely affecting the pictures and/or sound.
- Recorded data may be damaged, or pictures may be distorted, by strong magnetic fields created by speakers or large motors.
- Electromagnetic wave radiation generated by microprocessors may adversely affect this unit, disturbing the pictures and/or sound.
- If this unit is adversely affected by electromagnetic equipment and stops functioning properly, turn this unit off and remove the battery or disconnect AC adaptor (DMW-AC8E; optional). Then reinsert the battery or reconnect AC adaptor and turn this unit on.

Do not use this unit near radio transmitters or high-voltage lines.
- If you record near radio transmitters or high-voltage lines, the recorded pictures and/or sound may be adversely affected.

Information for Users on Collection and Disposal of Old Equipment and used Batteries

These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.
For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.
By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.
For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[Information on Disposal in other Countries outside the European Union]
These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Note for the battery symbol (bottom two symbol examples):
This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Contents

Information for Your Safety 2
Accessories 7
Names and Functions of Components 11
About the Lens 15
Attaching/Detaching the Lens 16
Attaching the Shoulder Strap 19
Charging the Battery 20
• Charging 20
• Approximate operating time and number of recordable pictures 21
Inserting and Removing the Card (optional)/the Battery 23
About the Card 24
• About cards that can be used with this unit 24
Setting Date/Time (Clock Set) 25
Selecting the Recording Mode 26
Taking a Still picture 28
Taking Pictures using the Automatic Function (Intelligent Auto Mode) 29
• Recording using Intelligent Auto Plus Mode 31
Taking Pictures with Defocus Control Function 32
Taking Pictures with Your Favourite Settings (Programme AE Mode) 33
Recording Motion Pictures 34
Playing Back Pictures/Motion Pictures 35
• Playing Back Pictures 35
• Playing Back Motion Pictures 36
Deleting Pictures 38
Setting the Menu 39
• Setting menu items 39
Compensating the Exposure 42
Taking Pictures by Specifying the Aperture/Shutter Speed 43
• Aperture-priority AE 43
• Shutter-priority AE 43
• Manual Exposure Mode 44
Reading the Operating Instructions (PDF format) 45
Specifications 46

Accessories

Check that all the accessories are supplied before using the camera.
Product numbers correct as of June 2011. These may be subject to change.

1 Digital Camera Body
(This is referred to as **camera body** in these operating instructions.)
2 Interchangeable Lens
"LUMIX G VARIO 14–42 mm/F3.5–5.6 ASPH./MEGA O.I.S."
(This is referred to as **lens** in these operating instructions.)
3 Lens Hood
4 Lens Cap
(This is attached to the interchangeable lens at the time of purchase.)
5 Lens Rear Cap
(This is attached to the interchangeable lens at the time of purchase.)
6 Interchangeable Lens
"LUMIX G VARIO 45–200 mm/F4.0–5.6/MEGA O.I.S."
(This is referred to as **lens** in these operating instructions.)
7 Lens Hood
8 Lens Cap
(This is attached to the interchangeable lens at the time of purchase.)
9 Lens Rear Cap
(This is attached to the interchangeable lens at the time of purchase.)
10 Battery Pack
(Indicated as **battery pack** or **battery** in the text)
Charge the battery before use.
11 Battery Charger
(Indicated as **battery charger** or **charger** in the text)
12 AC Mains Lead
13 AV Cable
14 USB Connection Cable
15 Body Cap
(This is attached to the camera body at the time of purchase.)
16 CD-ROM
• Software:
Use it to install the software to your PC.
17 CD-ROM
• Operating Instructions
18 Shoulder Strap
19 Stylus pen

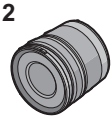
• SD Memory Card, SDHC Memory Card and SDXC Memory Card are indicated as **card** in the text.
• **The card is optional.**
• Description in these operating instructions is based on the interchangeable lens (H-FS014042).
• Consult the dealer or your nearest Service Centre if you lose the supplied accessories. (You can purchase the accessories separately.)

DMC-G3W＊2

DMC-G3K＊1

1

2

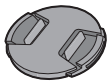


H-FS014042

3

VYC1009

4

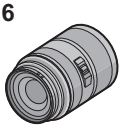


VYF3201

5

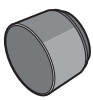
VFC4315

6



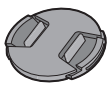
H-FS045200

7



VYC0986

8



VYF3201

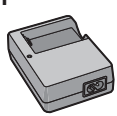
9

VFC4315

10

DMW-BLD10E

11

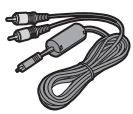


DE-A94A

12

K2CT3YY00034

13



K1HY08YY0016

14

K1HY08YY0015

15

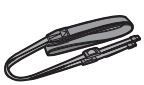
VKF4385

16

17

VFF0808

18



VFC4634 or
VFC4717＊3

19

VGQ0C14

＊1 Supplied in DMC-G3K only (lens kit product)
＊2 Supplied in DMC-G3W only (double zoom lens kit product)
＊3 This product number is DMC-G3W London Olympic Model only.

Sales and Support Information

Customer Care Centre

- For customers within the UK: 0844 844 3852
- For customers within Ireland: 01 289 8333
- Visit our website for product information
  www.panasonic.co.uk
- E-mail: customer.care@panasonic.co.uk

Technical Support for AV Software

- For customers within the UK: 0844 844 3869
- For customers within Ireland: 01 289 8333

Direct Sales at Panasonic UK

- For customers: 0844 844 3856
- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday – Thursday 9.00 a.m. – 5.30 p.m., Friday 9.30 a.m. – 5.30 p.m. (Excluding public holidays)
- Or go on line through our Internet Accessory ordering application at www.pas-europe.com.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

■ **Optional Accessories**

Lithum Ion Battery	DMW-BLD10
AC Adaptor*1	DMW-AC8
DC Coupler*1	DMW-DCC9
Flash	DMW-FL220, DMW-FL360, DMW-FL500
Remote Shutter	DMW-RSL1
Zoom Lever	DMW-ZL1
MC Protector	DMW-LMC52*2
ND Filter	DMW-LND52*2
PL Filter (Circular Type)	DMW-LPL52*2
Lens Cap	DMW-LFC52*2
Lens Rear Cap	DMW-LRC1*2
Body Cap	DMW-BDC1
Tripod Adaptor*3	DMW-TA1
HDMI mini Cable	RP-CDHM15, RP-CDHM30
Interchangeable Lens	H-VS014140, H-FS014042, H-FS014045, H-FS045200, H-F007014, H-ES045, H-H020, H-F008, H-H014, H-FS100300 (Read P15 for information about other lenses that can be used.)
The 3D Interchangeable Lens	H-FT012
Mount Adaptor	DMW-MA1, DMW-MA2M, DMW-MA3R
Class 10 64 GB SDXC Memory Card	RP-SDU64GE1K
Class 10 32 GB SDHC Memory Card	RP-SDA32GE1K/RP-SDU32GE1K
Class 10 16 GB SDHC Memory Card	RP-SDA16GE1K/RP-SDU16GE1K
Class 10 8 GB SDHC Memory Card	RP-SDA08GE1K/RP-SDU08GE1K
Class 10 4 GB SDHC Memory Card	RP-SDU04GE1K
Class 6 32 GB SDHC Memory Card	RP-SDQ32GE1K
Class 6 16 GB SDHC Memory Card	RP-SDQ16GE1K
Class 6 8 GB SDHC Memory Card	RP-SDQ08GE1K
Class 6 4 GB SDHC Memory Card	RP-SDQ04GE1K
Class 4 16 GB SDHC Memory Card	RP-SDN16GE1A
Class 4 8 GB SDHC Memory Card	RP-SDN08GE1A
Class 4 4 GB SDHC Memory Card	RP-SDN04GE1A
Class 4 2 GB SD Memory Card	RP-SDL02GE1K/RP-SDN02GE1A

Some optional accessories may not be available in some countries.

*1 The AC Adaptor (optional) can only be used with the designated Panasonic DC Coupler (optional). The AC adaptor (optional) cannot be used by itself.

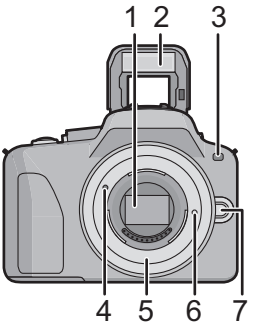
*2 If you are using other than the interchangeable lens (H-FS014042, H-FS045200), please use the optional accessories compatible with that lens.

*3 Use if the attached lens is in contact with the tripod pedestal.

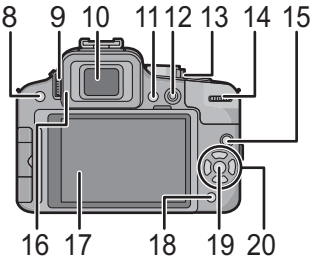
Names and Functions of Components

■ **Camera body**

1 Sensor
2 Flash
3 Self-timer indicator/
AF Assist Lamp
4 Lens fitting mark
5 Mount
6 Lens lock pin
7 Lens release button

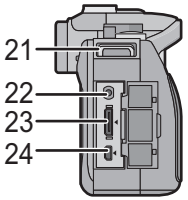


8 [LVF/LCD] button
9 Diopter adjustment dial
10 Viewfinder
11 Playback button
12 Motion picture button
13 Camera ON/OFF switch
14 Rear dial
15 [DISP./Fn1] button
16 Eye Cup
17 Touch panel/LCD monitor
18 [Q.MENU/Fn2] button/
Delete/Return button
19 [MENU/SET] button
20 Cursor buttons
▲/ISO
►/WB (White Balance)
◄/AF Mode button
▼/[DRIVE MODE] button
This button in picture record mode will allow the user to select between the following options.
Single/Burst/Auto bracket/Self-timer

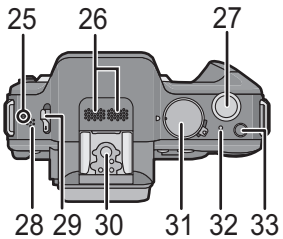


21 Shoulder strap eyelet
- Be sure to attach the shoulder strap when using the camera to ensure that you will not drop it.

22 [REMOTE] socket
23 [HDMI] socket
24 [AV OUT/DIGITAL] socket

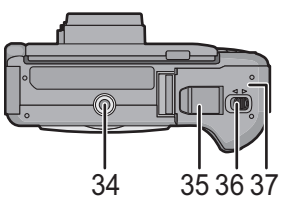


25 Focus distance reference mark
26 Stereo microphone
27 Shutter button
28 Speaker
29 Flash open lever
30 Hot shoe
31 Mode dial
32 Status indicator
33 Intelligent Auto button



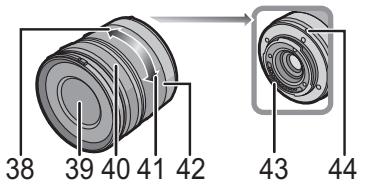
34 Tripod receptacle
35 DC coupler cover
- When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC9; optional) and AC adaptor (DMW-AC8E; optional) are used.
- Always use a genuine Panasonic AC adaptor (DMW-AC8E; optional).
- When using an AC adaptor, use the AC Mains Lead supplied with the AC adaptor.
- It is recommended to use a fully charged battery or AC adaptor when recording motion pictures.
- If while recording motion pictures using the AC adaptor and the power supply is cut off due to a power outage or if the AC adaptor is disconnected etc., the motion picture being recorded will not be recorded.

36 Release lever
37 Card/Battery door

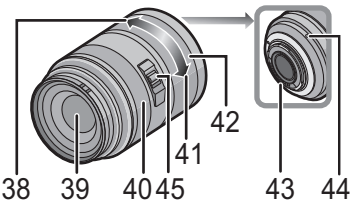


■ **Lens**

H-FS014042
(LUMIX G VARIO 14–42 mm/F3.5–5.6 ASPH./MEGA O.I.S.)



H-FS045200
(LUMIX G VARIO 45–200 mm/F4.0–5.6/ MEGA O.I.S.)



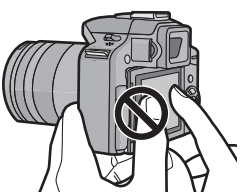
38 Tele
39 Lens surface
40 Focus ring
41 Wide
42 Zoom ring
43 Contact point
44 Lens fitting mark
45 [O.I.S.] switch

Touch Panel

This touch panel is a type that detects pressure.

Touch the screen To touch and release the touch panel.	**Drag** A movement without releasing the touch panel.
 Use this to perform tasks such as selecting icons or images displayed on the touch panel. • When selecting features using the touch panel, be sure to touch the centre of the desired icon.	 This is used to move the AF area, operate the slide bar, etc. This can also be used to move to the next image during playback, etc.

Note



- If you use a commercially available liquid crystal protection sheet, please follow the instructions that accompany the sheet. (Some liquid crystal protection sheets may impair visibility or operability.)
- If a commercially available protection sheet is used, **a little extra pressure** may be required if you notice that the touch panel is not responsive.
- Avoid having the hand holding the camera accidently apply pressure to the touch panel. Doing so may affect the touch panel operation.
- Do not press on the LCD monitor with hard pointed tips, such as ball point pens.
- Do not operate with your fingernails.
- Wipe the LCD monitor with dry soft cloth when it gets dirty with finger prints and others.
- Do not scratch or press the LCD monitor too hard.

■ About the Stylus pen

It is easier to use the stylus pen (supplied) for detailed operation or if it is hard to operate with your fingers.

- Only use the supplied stylus pen.
- Do not place it where small children can reach.

About the Lens

■ Micro Four Thirds™ mount specification lens

This unit can use the dedicated lenses compatible with the Micro Four Thirds System lens mount specification (Micro Four Thirds mount).

■ Four Thirds™ mount specification lens

Lens with the Four Thirds mount specification can be used by using the mount adaptor (DMW-MA1; optional).

■ Leica mount specification lens

- When you use the M mount adaptor or R mount adaptor (DMW-MA2M, DMW-MA3R; optional), you can use Leica M Mount or Leica R Mount interchangeable lenses.
  - For certain lenses, the actual distance at which the subject is in focus may differ slightly from the rated distance.
  - When using a Leica lens mount adaptor, set [SHOOT W/O LENS] to [ON].

Enjoying 3D pictures

■ Taking 3D pictures

Attaching the 3D interchangeable lens (H-FT012; optional) to the camera allows you to take 3D pictures for extra impact.

■ Playing back 3D pictures

To view 3D pictures, a television that supports 3D is required.
Connecting the camera to a 3D compatible television and playing back pictures taken in 3D allows you to enjoy 3D pictures for extra impact.
It is also possible to playback the recorded 3D pictures by inserting an SD card into the 3D compatible television with an SD card slot.

For current information regarding devices that can playback 3D pictures recorded with this unit, please refer to the below support site.
http://panasonic.jp/support/global/cs/dsc/ (This Site is English only.)

Note

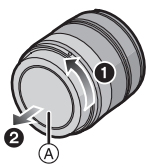
- Refer to the Operating Instructions (PDF fomat) for details.

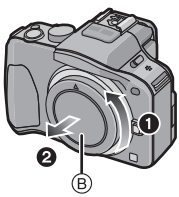
Attaching/Detaching the Lens

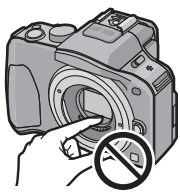
• Check that the camera is turned off.
• Change lenses where there is not a lot of dirt or dust.

Attaching a lens to the camera body

1 Turn the lens rear cap Ⓐ and the body cap Ⓑ in the direction of the arrow to detach them.



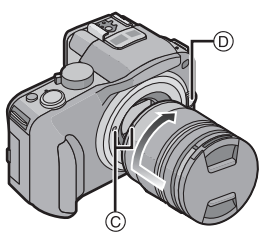




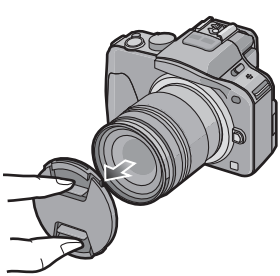
• Do not put your hands inside the mount.

2 Align the lens fitting marks Ⓒ (red marks) on the camera body and the lens and then rotate the lens in the direction of the arrow until it clicks.

• Do not press the lens release button Ⓓ when you attach a lens.
• Do not try to attach the lens when holding it at an angle to the camera body as the lens mount may get scratched.



3 Detach the lens cap.

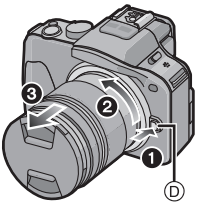


Detaching a lens from the camera body

1 **Attach the lens cap.**

2 **While pressing on the lens release button Ⓓ, rotate the lens toward the arrow until it stops and then remove.**

- Always attach the body cap to the camera body so that dirt or dust does not get inside.
- Attach the lens rear cap so that the lens contact point does not get scratched.



Note

- It is recommended to attach the lens cap or attach the MC Protector (optional) to protect the lens surface when carrying.

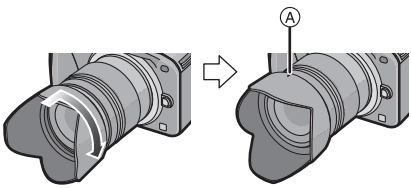
Attaching the Lens Hood

In bright sunlight or backlight, the lens hood will minimise lens flare and ghosting. The lens hood cuts off excess lighting and improves the picture quality.

To attach the lens hood (flower shape) that came with the interchangeable lens (H-FS014042)

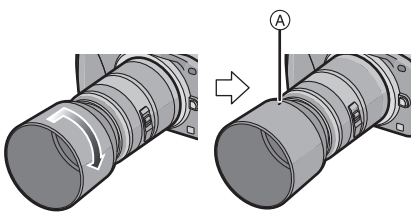
Insert the lens hood into the lens with the short sides at the top and bottom, and turn in the direction of the arrow until it stops.

Ⓐ Fitting to the mark.



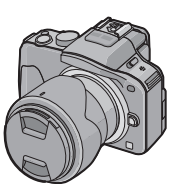
To attach the lens hood that came with the interchangeable lens (H-FS045200)

Insert the lens hood into the lens, and turn in the direction of the arrow until it stops.



Note

- When temporarily detaching and carrying the lens hood, attach the lens hood to the lens in the reverse direction.

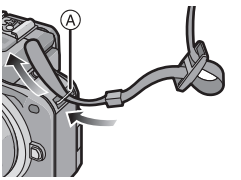


Attaching the Shoulder Strap

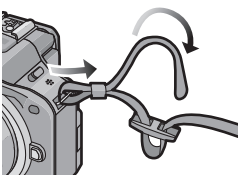
• We recommend attaching the shoulder strap when using the camera to prevent it from dropping.

1 **Pass the shoulder strap through the shoulder strap eyelet on the camera body.**

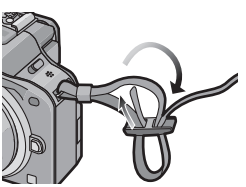
Ⓐ: Shoulder strap eyelet



2 **Pass the end of the shoulder strap through the ring in the direction of the arrow and then pass it through the stopper.**

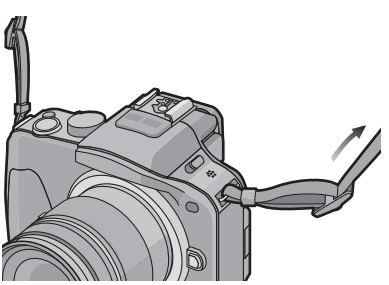


3 **Pass the end of the shoulder strap through the hole on the other side of the stopper.**



4 **Pull the other side of the shoulder strap and then check that it will not come out.**

• Perform steps **1** to **4** and then attach the other side of the shoulder strap.



Note

• Use the shoulder strap around your shoulder.
– Do not wrap the strap around your neck.
– It may result in injury or accident.
• Do not leave the shoulder strap where an infant can reach it.
– It may result in an accident by mistakenly wrapping around the neck.

Charging the Battery

■ About batteries that you can use with this unit

The battery that can be used with this unit is DMW-BLD10E.

It has been found that counterfeit battery packs which look very similar to the genuine product are made available to purchase in some markets. Some of these battery packs are not adequately protected with internal protection to meet the requirements of appropriate safety standards. There is a possibility that these battery packs may lead to fire or explosion. Please be advised that we are not liable for any accident or failure occurring as a result of use of a counterfeit battery pack. To ensure that safe products are used we would recommend that a genuine Panasonic battery pack is used.

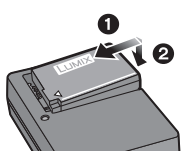
• Use the dedicated charger and battery.

Charging

• The battery is not charged when the camera is shipped. Charge the battery before use.

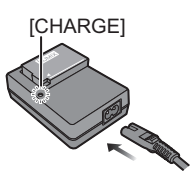
• Charge the battery with the charger indoors.

1 **Attach the battery paying attention to the direction of the battery.**



2 **Connect the AC mains lead.**

• Disconnect the charger from the electrical socket and detach the battery after charging is completed.



■ About the [CHARGE] indicator

On: It will light up while charging.

Off: It will turn off when it completes the charging normally.

• When the [CHARGE] indicator flashes

– The battery temperature is too high or too low. It is recommended to charge the battery again in an ambient temperature of between 10 °C to 30 °C (50 °F to 86 °F).

– The terminals of the charger or the battery are dirty. In this case, wipe them with a dry cloth.

■ **Charging time**

Charging time	Approx. 120 min

- **The indicated charging time is for when the battery has been discharged completely. The charging time may vary depending on how the battery has been used. The charging time for the battery in hot/cold environments or a battery that has not been used for a long time may be longer than normal.**

Approximate operating time and number of recordable pictures

■ **Battery indication**

The battery indication is displayed on the screen.

- The indication turns red and blinks if the remaining battery power is exhausted. (The status indicator also blinks) Recharge the battery or replace it with a fully charged battery.

■ **Recording still pictures (when using the LCD monitor/Viewfinder) (By CIPA standard in Programme AE Mode)**

When the interchangeable lens (H-FS014042) is used	
Number of recordable pictures	Approx. 270 pictures
Recording time	Approx. 135 min

When the interchangeable lens (H-FS045200) is used	
Number of recordable pictures	Approx. 250 pictures
Recording time	Approx. 125 min

Recording conditions by CIPA standard

- CIPA is an abbreviation of [Camera & Imaging Products Association].
- Temperature: 23 °C (73.4 °F)/Humidity: 50%RH when LCD monitor is on.
- Using a Panasonic SD Memory Card (2 GB).
- Using the supplied battery.
- Starting recording 30 seconds after the camera is turned on.
- **Recording once every 30 seconds** with full flash every second recording.
- Turning the camera off every 10 recordings and leaving it until the temperature of the battery decreases.

The number of recordable pictures varies depending on the recording interval time. If the recording interval time becomes longer, the number of recordable pictures decreases. [For example, if you were to take one picture every two minutes, then the number of pictures would be reduced to approximately one-quarter of the number of pictures given above (based upon one picture taken every 30 seconds).]

■ **Recording motion pictures (when using the LCD monitor)**

– [AVCHD] (Recording with picture quality set to [FSH])

When the interchangeable lens (H-FS014042) is used	
Recordable time	**Approx. 110 min**
Actual recordable time	**Approx. 55 min**

When the interchangeable lens (H-FS045200) is used	
Recordable time	**Approx. 100 min**
Actual recordable time	**Approx. 50 min**

– [MOTION JPEG] (Recording with picture quality set to [HD])

When the interchangeable lens (H-FS014042) is used	
Recordable time	**Approx. 120 min**
Actual recordable time	**Approx. 60 min**

When the interchangeable lens (H-FS045200) is used	
Recordable time	**Approx. 110 min**
Actual recordable time	**Approx. 55 min**

- These times are for an ambient temperature of 23 °C (73.4 °F) and a humidity of 50%RH. Please be aware that these times are approximate.
- Actual recordable time is the time available for recording when repeating actions such as switching the power supply [ON]/[OFF], starting/stopping recording etc.
- Motion pictures can be recorded continuously for up to 29 minutes 59 seconds. Also, motion picture recorded continuously in [MOTION JPEG] is up to 2 GB. Remaining time for continuous recording is displayed on the screen.

■ **Playback (when using the LCD monitor)**

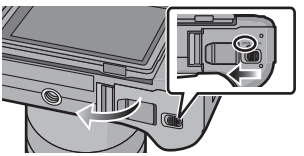
When the interchangeable lens (H-FS014042) is used	
Playback time	**Approx. 210 min**

When the interchangeable lens (H-FS045200) is used	
Playback time	**Approx. 190 min**

Inserting and Removing the Card (optional)/ the Battery

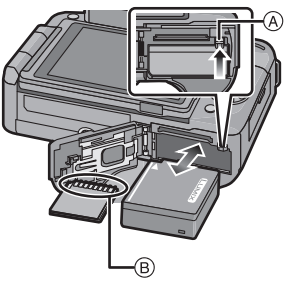
• Check that this unit is turned off.
• We recommend using a Panasonic card.

1 **Slide the release lever in the direction of the arrow and open the card/battery door.**



- **Always use genuine Panasonic batteries (DMW-BLD10E).**
- **If you use other batteries, we cannot guarantee the quality of this product.**

2 **Battery: Being careful about the battery orientation, insert all the way until you hear a locking sound and then check that it is locked by lever Ⓐ.**
Pull the lever Ⓐ in the direction of the arrow to remove the battery.

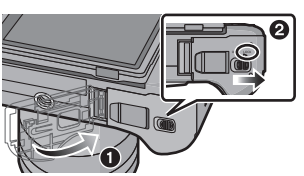


Card: Push it securely all the way until you hear a "click" while being careful about the direction in which you insert it. To remove the card, push the card until it clicks, then pull the card out upright.

Ⓑ: Do not touch the connection terminals of the card.

3 **❶:Close the card/battery door.**

❷:Slide the release lever in the direction of the arrow.



About the Card

About cards that can be used with this unit

The following cards which conform to the SD video standard can be used with this unit. (These cards are indicated as **card** in the text.)

	Remarks
SD Memory Card (8 MB to 2 GB)	• **Use a card with SD Speed Class* with "Class 4" or higher when recording motion pictures in [AVCHD]. Also, use a card with SD Speed Class with "Class 6" or higher when recording motion pictures in [MOTION JPEG].** • SDHC Memory Card can be used with SDHC Memory Card or SDXC Memory Card compatible equipment. • SDXC Memory Card can only be used with SDXC Memory Card compatible equipment. • Check that the PC and other equipment are compatible when using the SDXC Memory Cards. **http://panasonic.net/avc/sdcard/information/SDXC.html** • Only the cards with capacity listed left can be used.
SDHC Memory Card (4 GB to 32 GB)	
SDXC Memory Card (48 GB, 64 GB)	

∗ SD Speed Class is the speed standard regarding continuous writing. Check via the label on the card, etc.

e.g.:

Access to the card

The access indication lights red when pictures are being recorded on the card.

- **Do not turn this unit off, remove its battery or card, or disconnect the AC adaptor (DMW-AC8E; optional) when the access indication is lit (when pictures are being written, read or deleted, or the card is being formatted). Furthermore, do not subject the camera to vibration, impact or static electricity.**
  The card or the data on the card may be damaged, and this unit may no longer operate normally.
  If operation fails due to vibration, impact or static electricity, perform the operation again.
- Please confirm the latest information on the following website.
  http://panasonic.jp/support/global/cs/dsc/
  (This Site is English only.)

Note

- Keep the Memory Card out of reach of children to prevent swallowing.

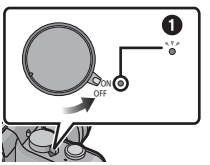
Setting Date/Time (Clock Set)

The clock can be setup with the following procedure at the time of purchase. Change the clock setting in [CLOCK SET] of the [SETUP] menu.
For details, read the PDF.

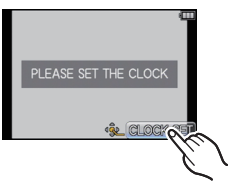
• The clock is not set when the camera is shipped.

1 Turn the camera on.

• The status indicator ❶ lights when you turn this unit on.



2 Touch [CLOCK SET].

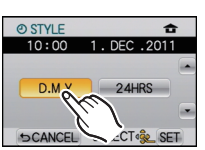


3 Touch the items you wish to set (Year/Month/Day/Hours/Minutes), and set using [▲]/[▼].

• You can continue to switch the settings by continuously touching [▲]/[▼].
• Touch [CANCEL] to cancel the date and time settings without setting a date and time.

To set the display order and the time display format.

• Touch [STYLE] to display the settings screen for setting display order/time display format.



4 Touch [SET] to set.

5 Touch [SET] in the confirmation screen.

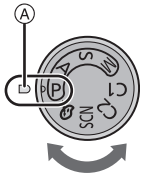
Selecting the Recording Mode

■ **To select a Recording Mode with the mode dial**

Switching the mode by rotating the mode dial.

Align a desired mode with part Ⓐ.

• Rotate the mode dial slowly and surely to adjust to each mode.



■ **To select Intelligent Auto Mode**

Press [iA].

• [iA] button will light up when it is switched to Intelligent Auto Mode.
• The Recording Mode selected by the mode dial is disabled while the [iA] button is lit.

■ **Basic**

Intelligent Auto Mode

The subjects are recorded using settings automatically selected by the camera.

Programme AE Mode

The subjects are recorded using your own settings.

■ **Advanced**

Aperture-Priority AE Mode

The shutter speed is automatically determined by the aperture value you set.

Shutter-Priority AE Mode

The aperture value is automatically determined by the shutter speed you set.

Manual Exposure Mode

The exposure is adjusted by the aperture value and the shutter speed which are manually adjusted.

Custom Mode

Use this mode to take pictures with previously registered settings.

Scene Mode

This allows you to take pictures that match the scene being recorded.

Creative Control Mode

Record while checking the image effect.

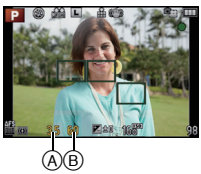
Recording Mode: iA P A S M C1 C2 SCN

Taking a Still picture

• Set the drive mode to [▭] by pressing ▼(⧉ ⏲).

1 Selecting the Recording Mode.

2 Press the shutter button halfway to focus.



Ⓐ Aperture value
Ⓑ Shutter speed

- Aperture value and shutter speed are displayed. (It will flash in red if the correct exposure is not achieved, except when set to flash.)
- **When the image is correctly focused, the picture will be taken, since the [FOCUS PRIORITY] is set initially to [ON].**

3 Press the shutter button fully (push it in further), and take the picture.

Recording Mode: iA

Taking Pictures using the Automatic Function
(Intelligent Auto Mode)

The camera will set the most appropriate settings to match the subject and the recording conditions so we recommend this mode for beginners or those who want to leave the settings to the camera and take pictures easily.

- The following functions are activated automatically.
  – Scene Detection/Backlight Compensation/Face Detection/Auto White Balance/ Intelligent ISO sensitivity control/[QUICK AF]/[RED-EYE REMOVAL]/[I.RESOLUTION]/ [I.DYNAMIC]/[LONG SHTR NR]/[SHADING COMP.]/[FOCUS PRIORITY]/ [AF ASSIST LAMP]

Press [iA].

- The camera will switch to either the most recently used of Intelligent Auto Mode or Intelligent Auto Plus Mode. At the time of purchase, the mode is set to Intelligent Auto Mode.
- [iA] button will light up when it is switched to Intelligent Auto Mode. [iA] button is turned off during recording to prevent the light reflecting on glass or similar, but this is not a malfunction.
- [iA] button is turned off and the camera is switched to Recording Mode setup before the Intelligent Auto Mode was set when it is pressed again.
- When the subject is touched, AF Tracking function works. It is also possible by pressing the cursor button towards ◄, and then pressing the shutter button halfway.
- Defocus control can be set by touching [ ] in the recording screen.
- **In Intelligent Auto Mode, [FOCUS PRIORITY] is fixed to [ON]. When the subject is correctly focused, the picture will be taken.**

Scene Detection

When the camera identifies the optimum scene, the icon of the scene concerned is displayed in blue for 2 seconds, after which its colour changes to the usual red.

When taking pictures

iA →	[i-PORTRAIT]	
	[i-SCENERY]	
	[i-MACRO]	
	[i-NIGHT PORTRAIT]	• Only when [iA] is selected
	[i-NIGHT SCENERY]	
	[i-BABY]*	
	[i-SUNSET]	

When recording motion pictures

iA →	[i-PORTRAIT]
	[i-SCENERY]
	[i-LOW LIGHT]
	[i-MACRO]

- [iA] is set if none of the scenes are applicable, and the standard settings are set.
- When [ ], [ ] or [ ] is selected, the camera automatically detects a person's face, and it will adjust the focus and exposure. **(Face Detection)**
- If a tripod is used, for instance, and the camera has judged that camera shake is minimal when the Scene Mode has been identified as [ ], the shutter speed will be slower than normal. Take care not to move the camera while taking pictures.
- An optimum scene for the specified subject will be chosen when set to AF tracking.
- When [FACE RECOG.] is set to [ON], and the face similar to the registered face is detected, [R] is displayed in the top right of [ ], [ ] and [ ].

* When [FACE RECOG.] is set to [ON], [ ] will be displayed for birthdays of registered faces already set only when the face of a person 3 years old or younger is detected.

Recording using Intelligent Auto Plus Mode

The brightness and colour optimally set by the camera can be easily matched to your preferences.
This mode is useful for those who would like the settings made by the camera to match their preferences but do not like dealing with detailed settings.

1 **Press [MENU/SET] when in Intelligent Auto Mode.**

2 **Select [iA MODE] and then press [MENU/SET].**

3 **Press ► to select [iA+] and then press [MENU/SET].**

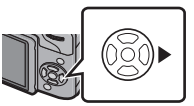
Setting brightness

1 **Press the rear dial to display the setting screen.**
- Each press of the rear dial switches among brightness setting, Defocus Control and end operation.

2 **Touch the slide bar to set.**
- Setting can also be performed by rotating the rear dial.

Setting colour

1 **Press ► (WB) to display the setting screen.**



2 **Touch the slide bar to set.**
- This will adjust the colour of the image from red colour to blue colour.
- Setting can also be performed by rotating the rear dial.

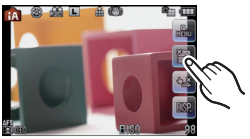
Recording Mode: iA

Taking Pictures with Defocus Control Function

You can easily set the blurriness of the background while checking the screen.

1 Touch [ ] to display the setting screen.

- When using the viewfinder, press the rear dial several times to display the Defocus Control setting screen.



2 Touch the slide bar to set.

- Setting can also be performed by rotating the rear dial.

3 Recording of pictures or motion pictures.

- It is also possible to record a picture by touching [ ].
- Defocus Control operation can be ended by touching [ ].
- When using the viewfinder, pressing the rear dial will end the Defocus Control operation.

Recording Mode: P

Taking Pictures with Your Favourite Settings
(Programme AE Mode)

The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject.
You can take pictures with greater freedom by changing various settings in [REC] menu.

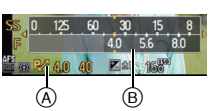
Set the mode dial to [P].

Note
- The shutter speed is automatically set between about 20 seconds and 1/4000th of a second in the following cases.
  – When the [SENSITIVITY] is set to [ISO160].
  – When the aperture value is set to F3.5 [when the interchangeable lens (H-FS014042) is attached].
  – When the aperture value is set to F4.0 [when the interchangeable lens (H-FS045200) is attached].

Programme Shift

In Programme AE Mode, you can change the preset aperture value and shutter speed without changing the exposure. This is called Programme Shift.
You can make the background more blurred by decreasing the aperture value or record a moving subject more dynamically by slowing the shutter speed when taking a picture in Programme AE Mode.

1 Press the shutter button halfway and display the aperture value and shutter speed value on the screen.
2 While the values are displayed (about 10 seconds), perform the Programme Shift by rotating the rear dial.



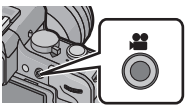
- It will switch between Programme Shift operation and Exposure Compensation operation every time the rear dial is pressed while the values are displayed.
- Rotate the rear dial to display the [EXPO.METER] Ⓑ.
- The Programme Shift indication Ⓐ appears on the screen when Programme Shift is activated.
- To cancel Programme Shift, turn the camera off or rotate the rear dial until the Programme Shift indication disappears.

Recording Mode: iA P A S M C1 C2 SCN

Recording Motion Pictures

This can record full high definition motion pictures compatible with the AVCHD format or motion pictures recorded in Motion JPEG.
Audio will be recorded in stereo.
The functions available when recording motion pictures differ according to the lens you are using, and the operational sound of the lens may be recorded.
Recording of motion picture appropriate for each mode is possible.

• Screen here is an example of when the Recording Mode is set to [P] (Programme AE Mode).



1 Start recording by pressing the motion picture button.

Ⓐ Elapsed recording time
Ⓑ Available recording time

• The recording state indicator (red) Ⓒ will flash while recording motion pictures.

2 Stop the recording by pressing the motion picture button again.

Note

• Motion pictures can be recorded continuously for up to 29 minutes 59 seconds. Also, motion picture recorded continuously in [MOTION JPEG] is up to 2 GB. Remaining time for continuous recording is displayed on the screen.

Playing Back Pictures

1 **Press [▶].**

2 **Forward or rewind the image by dragging the screen horizontally.**

Forward: drag from right to left
Rewind: drag from left to right

- It is also possible to forward or rewind the image by pressing ◄/► of the cursor button.
- Speed of picture forwarding/rewinding changes depending on the playback status.
- You can forward or rewind pictures continuously by keeping your finger on the left or right sides of the screen after forwarding/rewinding a picture. (Pictures are displayed reduced in size)

■ To finish playback

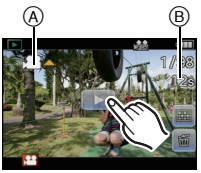
Press [▶] again, press the motion picture button or press the shutter button halfway.

Playing Back Motion Pictures

- This unit was designed to play motion pictures using the AVCHD and QuickTime Motion JPEG formats that were taken with this model (only).
- Motion pictures in AVCHD format that can be played back on this unit are [AVCHD] motion pictures that were recorded with this unit, AVCHD format (including [AVCHD Lite]) motion pictures recorded with Panasonic digital cameras (LUMIX) only.

1 **Press [▶].**

2 **Select a picture with a Motion Picture icon ([🎥], [🎞]) and then touch [▶] to play back.**



Ⓐ Motion picture icon
Ⓑ The motion picture recording time

- After playback starts, the elapsed playback time is displayed on the screen.
  For example, 8 minutes and 30 seconds is displayed as [8m30s].
- Some information (recording information, etc.) is not displayed for motion pictures recorded in [AVCHD].
- Pressing the cursor button ▲ to allows you to play back motion pictures.
  Display at the bottom right of the screen while playing back corresponds to ▲/▼/◀/▶ on the cursor button.

■ **Operations performed during Motion Picture Playback**

1 Display control panel by touching screen.

• If no operation is performed for 2 seconds, it will return to original status.

2 Operate control panel by touching.

▶/❚❚	Play/Pause	■	Stop
◀◀	Fast rewind	▶▶	Fast forward
◀❚❚	Frame-by-frame rewind (while pausing)	❚❚▶	Frame-by-frame forward (while pausing)
+	Increase volume level	−	Reduce volume level

• About fast forward/rewind playback

– Touch [▶▶] during playback to fast forward (touch [◀◀] to fast rewind). The fast forward/rewind speed increases if you touch [▶▶]/[◀◀] again. (The display on the screen changes from [▶▶] to [▶▶▶].)

– Touch [▶/❚❚] to resume normal playback speed.

– When using a high capacity card, it is possible that fast rewinding may be slower than usual.

Deleting Pictures

Once deleted, pictures cannot be recovered.

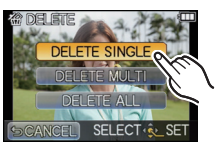
Press [▶].

To delete a single picture

1 **Select the picture to be deleted, and then touch [🗑].**

2 **Touch [DELETE SINGLE].**

- Confirmation screen is displayed.
  Picture is deleted by selecting [YES].



Setting the Menu

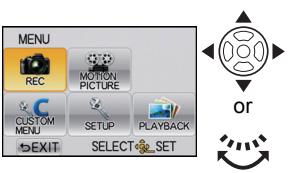
This camera offers menu selections that allow you to customize its operation to maximise your picture taking experience.
In particular, the [SETUP] menu contains some important settings relating to the camera's clock and power. Check the settings of this menu before proceeding to use the camera.

Setting menu items

• If you set [MENU RESUME] in the [CUSTOM] menu to [ON], the screen shows the last selected menu item when the camera was turned off.
It is set to [ON] at the time of purchase.

1 **Press [MENU/SET].**

2 **Select the menu by pressing ▲/▼/◄/► or by rotating the rear dial.**

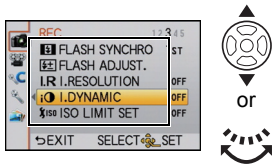


Menu	Description of settings
[REC]	This menu lets you set the aspect ratio, number of pixels and other aspects of the pictures you are recording.
[MOTION PICTURE]	This menu lets you set the [REC MODE], [REC QUALITY], and other aspects for motion picture recording.
[CUSTOM]	Operation of the unit, such as displaying of the screen and button operations, can be set up according to your preferences. Also, it is possible to register the modified settings.
[SETUP]	This menu lets you perform the clock settings, select the operating beep tone settings and set other settings which make it easier for you to operate the camera.
[PLAYBACK]	This menu lets you set the Protection, Cropping or Print Settings, etc. of recorded pictures.

3 **Press [MENU/SET] to display the menu.**

4 **Select the menu item by pressing ▲/▼ or by rotating the rear dial.**

- Select the item at the very bottom, and press ▼ or rotate the rear dial right to move to the next screen.

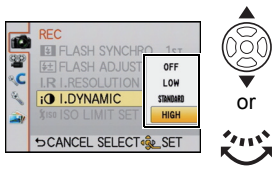


5 **Press [MENU/SET] or the rear dial.**

- Depending on the menu item, its setting may not appear or it may be displayed in a different way.

6 **Select the settings by pressing ▲/▼ or by rotating the rear dial.**

- The figure on the right is an example of setting [I.DYNAMIC] from [OFF] to [HIGH].



7 **Press [MENU/SET] or the rear dial to set.**

■ Close the menu

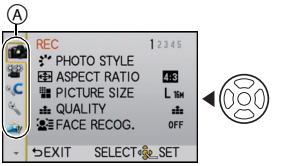
Press [🗑/↩] several times or press the shutter button halfway.

■ **Switching to other menus**

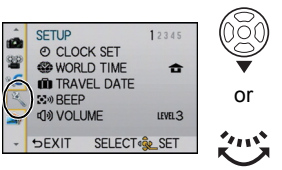
e.g.: Switching to the [SETUP] menu from [REC] menu

1 **Press ◄.**

Ⓐ Menu toggle icon

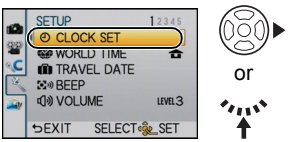


2 **Press ▼ or rotate the rear dial to select the [SETUP] menu icon [ ].**



3 **Press ► or the rear dial.**

• Select a menu item next and set it.



Recording Mode: P A S C1 C2 SCN

Compensating the Exposure

Use this function when you cannot achieve appropriate exposure due to the difference in brightness between the subject and the background. Look at the following examples.

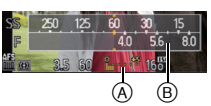
Underexposed | **Properly exposed** | **Overexposed**

Compensate the exposure towards positive.

Compensate the exposure towards negative.

1 Press the rear dial to switch to Exposure Compensation operation.

2 Rotate the rear dial to compensate the exposure.



Ⓐ Exposure Compensation value
Ⓑ [EXPO.METER]

- The Exposure Compensation value can be set within a range of −5 EV to +5 EV. When recording motion pictures, the Exposure Compensation value can be set within a range of −3 EV to +3 EV.
- Select [0] to return to the original exposure.
- Rotate the rear dial to display the [EXPO.METER]. (However, it does not appear in SCN/ Mode.)

Recording Mode: A S M

Taking Pictures by Specifying the Aperture/ Shutter Speed

Aperture-priority AE

Set the aperture value to a higher number when you want a sharp focus background. Set the aperture value to a lower number when you want a soft focus background.

1 **Set the mode dial to [A].**

2 **Rotate the rear dial to set the aperture value.**

- It will switch between aperture setting operation and Exposure Compensation operation every time the rear dial is pressed.

Shutter-priority AE

When you want to take a sharp picture of a fast moving subject, set with a faster shutter speed. When you want to create a trail effect, set to a slower shutter speed.

1 **Set the mode dial to [S].**

2 **Rotate the rear dial to set the shutter speed.**

- It will switch between shutter speed setting operation and Exposure Compensation operation every time the rear dial is pressed.

Manual Exposure Mode

Determine the exposure by manually setting the aperture value and the shutter speed. The Manual Exposure Assistance appears on the lower portion of the screen to indicate the exposure.

1 Set the mode dial to [M].

2 Rotate the rear dial to set the aperture and shutter speed.

- It will switch between aperture setting operation and shutter speed setting operation every time the rear dial is pressed.

Ⓐ Manual Exposure Assistance

■ **Manual Exposure Assistance**

±0	The exposure is adequate.
0 +3	Set to faster shutter speed or larger aperture value.
−3 0	Set to slower shutter speed or smaller aperture value.

• The Manual Exposure Assistance is an approximation. We recommend checking the pictures on the playback screen.

Reading the Operating Instructions (PDF format)

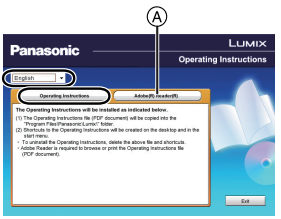
More detailed instructions on the operation of this camera are contained in "Operating Instructions for advanced features (PDF format)" in the supplied CD-ROM. Install it on your PC to read it.

■ For Windows

1 Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).

2 Select the desired language and then click [Operating Instructions] to install.

3 Double click the "Operating Instructions" shortcut icon on the desktop.



■ When the Operating Instructions (PDF format) will not open

You will need Adobe Acrobat Reader 5.0 or later or Adobe Reader 7.0 or later to browse or print the Operating Instructions (PDF format).
Insert the CD-ROM containing the Operating Instructions (supplied), click Ⓐ and then follow the messages on the screen to install.
(Compatible OS: Windows XP SP3/Windows Vista SP2/Windows 7)

• You can download and install a version of Adobe Reader that you can use with your OS from the following Web Site.
http://get.adobe.com/reader/otherversions

■ To uninstall the Operating Instructions (PDF format)

Delete the PDF file from the "Program Files\Panasonic\Lumix\" folder.

■ For Mac

1 Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).

2 Open the "Manual" folder in the CD-ROM and then copy the PDF file with the desired language inside the folder.

3 Double click the PDF file to open it.

Specifications

Digital Camera Body (DMC-G3):
Information for your safety

Power Source:	DC 8.4 V
Power Consumption:	3.1 W (When recording with LCD Monitor) [When the Interchangeable lens (H-FS014042) is used] 3.3 W (When recording with LCD Monitor) [When the Interchangeable lens (H-FS045200) is used] 1.9 W (When playing back with LCD Monitor) [When the Interchangeable lens (H-FS014042) is used] 2.1 W (When playing back with LCD Monitor) [When the Interchangeable lens (H-FS045200) is used]

Camera effective pixels	16,000,000 pixels
Image sensor	4/3″ Live MOS sensor, total pixel number 16,680,000 pixels, Primary colour filter
Digital Zoom	Max. 4×
Extra Tele Conversion (Except for the maximum picture size for each aspect ratio)	ON/OFF simple enlargement (compatible with lenses from other manufacturers)
Focus	Auto Focus/Manual Focus, Face Detection/AF Tracking/23-area-focusing/ 1-area-focusing/Pinpoint (Touch focus area selection possible)
Shutter system	Focal-plane shutter
Burst recording	
Burst speed	20 pictures/second (Super high speed), 4 pictures/second (High speed), 3 pictures/second (Middle speed), 2 pictures/second (Low speed)
Number of recordable pictures	Max. 7 pictures (when there are RAW files) Depends on the capacity of the card (when there are no RAW files)
ISO sensitivity (Standard Output Sensitivity)	AUTO/ISO160/200/400/800/1600/3200/6400 (1/3 EV step change possible)

Minimum Illumination	Approx. 9 lx (when i-Low light is used, the shutter speed is 1/25th of a second) [When the Interchangeable lens (H-FS014042) is used] Approx. 12 lx (when i-Low light is used, the shutter speed is 1/25th of a second) [When the Interchangeable lens (H-FS045200) is used]
Shutter speed	B (Bulb) (Max. approx. 120 seconds), 60 seconds to 1/4000th of a second Taking still pictures during motion picture recording Motion picture priorities: 1/25th of a second to 1/16000th of a second Still picture priorities: B (Bulb) (Max. approx. 120 seconds), 60 seconds to 1/4000th of a second
Metering range	EV 0 to EV 18
White Balance	Auto White Balance/Daylight/Cloudy/Shade/Incandescent lights/Flash/White set1/White set2/White Balance K set
Exposure (AE)	Programme AE (P)/Aperture-priority AE (A)/Shutter-priority AE (S)/Manual exposure (M)/AUTO Exposure Compensation (1/3 EV Step, −5 EV to +5 EV)
Metering Mode	Multiple/Centre weighted/Spot
LCD monitor	3.0″ TFT LCD (3:2) (Approx. 460,000 dots) (field of view ratio about 100%) Touch panel
Viewfinder	Colour LCD Viewfinder (Approx. 1,440,000 dots) (field of view ratio about 100%) (with diopter adjustment −4 to +4 diopter)
Flash	Built-in pop up flash GN 10.5 equivalent (ISO160·m) Flash range: Approx. 50 cm (1.64 feet) to 6.7 m (22.0 feet) [When the Interchangeable lens (H-FS014042) is mounted, WIDE, [ISO AUTO] is set] Flash range: Approx. 1.0 m (3.28 feet) to 5.8 m (19.0 feet) [When the Interchangeable lens (H-FS045200) is mounted, WIDE, [ISO AUTO] is set] AUTO, AUTO/Red-Eye Reduction, Forced ON, Forced ON/Red-Eye Reduction, Slow Sync., Slow Sync./Red-Eye Reduction, Forced OFF
Flash synchronization speed	Equal to or smaller than 1/160th of a second
Microphone	Stereo
Speaker	Monaural
Recording media	SD Memory Card/SDHC Memory Card/SDXC Memory Card

Picture size	
Still picture	When the aspect ratio setting is [4:3] 4592×3448 pixels, 3232×2424 pixels, 2272×1704 pixels When the aspect ratio setting is [3:2] 4576×3056 pixels, 3232×2160 pixels, 2272×1520 pixels When the aspect ratio setting is [16:9] 4576×2576 pixels, 3232×1824 pixels, 1920×1080 pixels When the aspect ratio setting is [1:1] 3424×3424 pixels, 2416×2416 pixels, 1712×1712 pixels
Recording quality	
Motion pictures	[AVCHD] (With audio) When set to [FSH]: 1920×1080 pixels (50i* recording/ Approx. 17 Mbps)/ When set to [SH]: 1280×720 pixels (50p* recording/ Approx. 17 Mbps) (*Sensor output is 25 frames/sec.) [MOTION JPEG] (With audio) When set to [HD]: 1280×720 pixels (30 frames/sec.)/ When set to [VGA]: 640×480 pixels (30 frames/sec.)/ When set to [QVGA]: 320×240 pixels (30 frames/sec.)
Quality	RAW/RAW+Fine/RAW+Standard/Fine/Standard/MPO+Fine/ MPO+Standard
Recording file format	
Still Picture	RAW/JPEG (based on “Design rule for Camera File system”, based on “Exif 2.3” standard, DPOF corresponding)/MPO
Motion pictures with audio	AVCHD/QuickTime Motion JPEG
Interface	
Digital	“USB 2.0” (High Speed) * Data from the PC can not be written to the camera using the USB connection cable.
Analogue video/ audio	NTSC/PAL Composite (Switched by menu) Audio line output (monaural)
Terminal	
[REMOTE]	ϕ 2.5 mm jack
[AV OUT/DIGITAL]	Dedicated jack (8 pin)
[HDMI]	MiniHDMI TypeC
Dimensions	Approx. 115.2 mm (W)×83.6 mm (H)×46.7 mm (D) [4.54″ (W)×3.29″(H)×1.84″ (D)] (excluding the projecting parts)
Mass	Approx. 544 g/1.2 lb [with the Interchangeable lens (H-FS014042), card and battery] Approx. 761 g/1.68 lb [with the Interchangeable lens (H-FS045200), card and battery] Approx. 336 g/0.74 lb (camera body)
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Operating humidity	10%RH to 80%RH

Battery Charger (Panasonic DE-A94A):
Information for your safety

Input:	AC ～ 110 V to 240 V, 50/60 Hz, 0.2 A
Output:	DC ⎓ 8.4 V, 0.65 A

Battery Pack (lithium-ion) (Panasonic DMW-BLD10E):
Information for your safety

Voltage/capacity:	7.2 V/1010 mAh

Interchangeable Lens (H-FS014042)
"LUMIX G VARIO 14–42 mm/F3.5–5.6 ASPH./MEGA O.I.S."

Focal length	f=14 mm to 42 mm (35 mm film camera equivalent: 28 mm to 84 mm)
Aperture type	7 diaphragm blades/circular aperture diaphragm
Aperture range	F3.5 (Wide) to F5.6 (Tele)
Minimum aperture value	F22
Lens construction	12 elements in 9 groups (1 aspherical lens)
In focus distance	0.3 m (0.99 feet) to ∞ (from the focus distance reference line)
Maximum image magnification	0.16× (35 mm film camera equivalent: 0.32×)
Optical Image Stabilizer	Available
[O.I.S.] switch	None (Setting of the [STABILIZER] is done in [REC] menu.)
Mount	"Micro Four Thirds Mount"
Angle of view	75° (Wide) to 29° (Tele)
Filter diameter	52 mm (2.05 inch)
Max. diameter	Approx. 60.6 mm (2.39 inch)
Overall length	Approx. 63.6 mm (2.50 inch) (from the tip of the lens to the base side of the lens mount)
Mass	Approx. 165 g/0.22 lb

Interchangeable Lens (H-FS045200)
"LUMIX G VARIO 45–200 mm/F4.0–5.6/MEGA O.I.S."

Focal length	f=45 mm to 200 mm (35 mm film camera equivalent: 90 mm to 400 mm)
Aperture type	7 diaphragm blades/circular aperture diaphragm
Aperture range	F4.0 (Wide) to F5.6 (Tele)
Minimum aperture value	F22
Lens construction	16 elements in 13 groups (no aspherical lens)
In focus distance	1.0 m (3.28 feet) to ∞ (from the focus distance reference line)
Maximum image magnification	0.19× (35 mm film camera equivalent: 0.38×)
Optical Image Stabilizer	Available
[O.I.S.] switch	Available (Switching ON/OFF)
Mount	"Micro Four Thirds Mount"
Angle of view	27° (Wide) to 6.2° (Tele)
Filter diameter	52 mm (2.05 inch)
Max. diameter	Approx. 70 mm (2.76 inch)
Overall length	Approx. 100 mm (3.94 inch) (from the tip of the lens to the base side of the lens mount)
Mass	Approx. 380 g/0.84 lb

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EU

Pursuant to at the directive 2004/108/EC, article 9(2)
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